



May 19, 2005  
RC-05-0076

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION  
DOCKET NO. 50/395  
OPERATING LICENSE NO. NPF-12  
SPECIAL REPORT (SPR 2005-001)

South Carolina Electric & Gas Company (SCE&G) is submitting this report pursuant to the requirements of Technical Specification Surveillance Requirement 4.4.5.5.a. & b. This inspection constitutes the "Thirteenth In-service Inspection" of Steam Generator tubes.

- Section 4.4.5.5.a requires that the number of tubes plugged or repaired in each generator be reported in a Special Report within 15 days following the completion of each in-service inspection of steam generator tubes. The inspection activity during Refueling Outage 15 at the Virgil C. Summer Nuclear Station was completed on May 8, 2005.

Summarized in the table below is the number of plugs installed in each generator as a result of the inspections performed during this outage.

Generator	A	B	C
No. Plugged in RF-15	0	0	0
Previously Plugged	3	1	4
Total Tubes Plugged	3	1	4

No tube plugging was required in this outage.

- Section 4.4.5.5.b requires that within 12 months following the completion of the in-service inspection of the generators, the complete results will be submitted to the Commission as a Special Report. This information is being provided below:

1. **Number and extent of the tubes inspected.**

**Steam Generator "A"**

- 6,304 tubes (100%) Bobbin Exam Full Length
- 1,262 tubes (20%) Hot Leg TTS +3" to -3"
- 30 tubes Low Row U-bend Region
- 58 areas of "Special Interest" (i.e. Potential Loose Parts, Dents, Dings, Bobbin Indications of Interest)

**NUCLEAR EXCELLENCE - A SUMMER TRADITION!**

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**Steam Generator "B"**

- 6,306 tubes (100%) Bobbin Exam Full Length
- 1,262 tubes (20%) Hot Leg TTS +3" to -3"
- 39 areas of "Special Interest" (i.e. Potential Loose Parts, Dents, Dings, Bobbin Indications of Interest)

**Steam Generator "C"**

- 6,303 tubes (100%) Bobbin Exam Full Length
- 1,262 tubes (20%) Hot Leg TTS +3" to -3"
- 65 areas of "Special Interest" (i.e. Potential Loose Parts, Dents, Dings, Bobbin Indications of Interest)

**2. Location and percent of wall-thickness penetration for each indication of an imperfection.**

**Steam Generator "A"**

Two tubes were found to have wear-like indications at the anti-vibration bars.

- Tube R19-C140 was found to have a wear-like indication with an estimated depth of 7% at AV7.
- Tube R26-C139 was found to have a wear-like indication with an estimated depth of 4% at AV2 and 5% at AV7.

All three of the wear-like indications were found to be apparent in the review of the 1994 pre-service inspection and all three were very similar to the results found in the RF-12 inspection. This would indicate that they were present during pre-service.

Two tubes were found to have wear-like indications at the TSPs.

- Tube R2-C77 was found to have indications at the upper and lower edges of the 08H TSP with estimated depths of 8 and 21% TW, respectively.
- Tube R4-C103 was found to have indications at the upper and lower edges of the 05C TSP with estimated depths of 10 and 8% TW, respectively.

All indications were found to be apparent in the review of the 2000 bobbin coil inspection and all were very similar in signal characteristics to the RF-12 inspection data. This would indicate very small growth rate over 2 complete cycles of operation.

**Steam Generator "B"**

No degradation detected.

**Steam Generator "C"**

One tube was found to have a wear like indication at an anti-vibration bar.

- Tube R26-C3 was found to have a wear like indication with an estimated depth of 4% at AV2.

This wear-like indication was found to be apparent in the review of the 1994 pre-service inspection and was also very similar in the data from the RF-12 inspection. This would indicate that it was present during pre-service.

Three tubes were found to have wear-like indications at the TSPs.

- Tube R1-C8 was found to have an indication at the upper edge of the 07C TSP with an estimated depth of 5% TW.
- Tube R1-C82 was found to have an indication at the upper edge of the 08H TSP with an estimated depth of 6% TW.
- Tube R1-C94 was found to have an indication at the upper edge of the 06H TSP with an estimated depth of 11% TW.

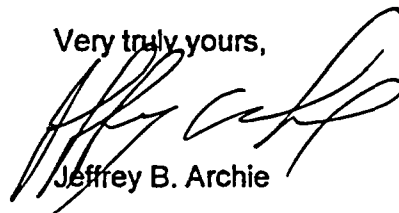
All but one (R1-C82) of the indications was found to be apparent in the review of the 2000 bobbin coil inspection and all were very similar in signal characteristics to the RF-12 inspection data. This would indicate very small growth rate over 2 complete cycles of operation.

**3. Identification of tubes plugged.**

No tubes required plugging.

Should you have any questions regarding these inspection results, please call Mr. Charles McKinney at (803) 345-4723.

Very truly yours,



Jeffrey B. Archie

CJM/JBA/cm

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